



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,252	03/17/2004	Takashi Ibuka	09253-007001	5146
26161	7590	08/12/2005		EXAMINER
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022				ALLEN, ANDRE J
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/802,252	IBUKA ET AL. <i>(Signature)</i>
	Examiner Andre J. Allen	Art Unit 2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 March 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-4, 6-9, 11 and 12 is/are rejected.
 7) Claim(s) 5 and 10 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7-12-04, 3-17-04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,4 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayakawa (US 2002/0163977).

Regarding claims 1 Kobayakawa teaches an oscillator circuit [0009], which generates the carrier wave; and a compensation device 4a 4b, 113 for compensating a deviation of the amplitude [0018] of the carrier wave generated by the oscillator circuit relative to a predetermined reference value such that the amplitude of the carrier becomes equal to the reference value R1 –R3.

Regarding claims 2,4 and 12 Kobayakawa teaches an amplifier [0043] for amplifying the carrier wave, wherein the amplitude of the carrier wave changes in accordance with a current applied to the amplifier, and wherein the compensation device 113 adjusts a value of the current applied to the amplifier [0068]. (Since Kobayakawa compensates a deviation and R1-R3 is involved, current is inherently altered when a resistance is changed.)

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Kobayakawa (US 2002/0163977).

Regarding claim 3 by Kobayakawa (does not teach the amplifier to be a transistor, however since by Kobayakawa at least discloses an amplifier, lacking any criticality it would have been obvious to a person having ordinary skill in the art of circuitry to choose an amplifying element on the basis of its suitability at the time the invention was made to modify the amplifier taught by Kobayakawa to be a transistor since the examiner takes official notice of the amplifier taught by Kobayakawa and a transistor used to amplify a signal for their use in the field of circuits that carry carrier waves and the selection of any known equivalent to describe an amplifier would be within the level of ordinary skill in the art.

3. Claims 6 and 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Kobayakawa (US 2002/0163977) in view of Applicants Admitted Prior Art (AAPA).

Regarding claims 6 and 7, Kobayakawa teaches all the basic features of the claimed invention except implementing compensation of amplitude deviation with a tire condition sensor according to tire

temperature. AAPA teaches a means to compensate for amplitude deviation associated with a tire condition device according to temperature (pages 1-2).

It would have been obvious to a person having ordinary skill in the art of sensors at the time the invention was made to modify the device (amplitude deviation compensation) as taught by Kobayakawa to be used with a tire condition since already having means to compensate for amplitude deviation as taught by AAPA for the purpose of maintaining a constant amplitude carrier wave (AAPA page 2)

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Kobayakawa (US 2002/0163977) in view of Applicants Admitted Prior Art (AAPA).

Regarding claim 8, Kobayakawa teaches all the basic features of the claimed invention except a tire condition sensor. AAPA teaches a means to compensate for amplitude deviation associated with a tire condition device (pages 1-2).

It would have been obvious to a person having ordinary skill in the art of sensors at the time the invention was made to modify the device (amplitude deviation compensation) as taught by Kobayakawa to be used with a tire condition since already having means to compensate for

amplitude deviation as taught by AAPA for the purpose of maintaining a constant amplitude carrier wave (AAPA page 2)

Regarding claim 9 Kobayakawa teaches an amplifier [0043] for amplifying the carrier wave, wherein the amplitude of the carrier wave changes in accordance with a current applied to the amplifier, and wherein the compensation device 113 adjusts a value of the current applied to the Amplifier [0068]. (Since Kobayakawa compensates a deviation and R1-R3 is involved, current is inherently altered when a resistance is changed.)

Allowable Subject Matter

5. Claims 5 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art does not disclose nor suggest wherein, when transmission of the transmitter is started, the controller/compensation device first sets up the value of the current applied to the amplifier to a predetermined initial value, and the controller gradually increases the value of the current applied to the amplifier until the amplitude of the carrier wave reaches the reference value.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 571-272-2174. The examiner can normally be reached on mon-fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

André Allen
Patent Examiner
Art Unit 2855



EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800